



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,636	11/05/2002	Qi Wang	6938cip	5965
34778	7590	02/07/2005	EXAMINER	
RICHARD D. FUERLE 1711 W. RIVER RD. GRAND ISLAND, NY 14072			EGWIM, KELECHI CHIDI	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 02/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
P.O. Box 1450  
ALEXANDRIA, VA 22313-1450  
www.uspto.gov

**MAILED**  
FEB 07 2005  
**GROUP 1700**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/065,636  
Filing Date: November 05, 2002  
Appellant(s): WANG ET AL.

---

Richard Fuerle  
For Appellant

**SUPPLEMENTAL EXAMINER'S ANSWER**

In response to the remand by the Board filed 01/13/05, the prior Examiner's Answer is hereby vacated. The following is in response to the Appeal Brief filed 6/18/04.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences that will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 21,22,26,28,29,31,33,38 and 39.

Claims 21, 27-29, 34 and 37 have been amended subsequent to the final rejection.

Claims 34-37 are allowed.

Claims 23-25,27,30,32 and 40 are withdrawn from consideration as not directed to the elected invention.

Claims 1-20 have been canceled.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is deficient because, firstly, the claims are NOT to a method of inhibiting polyesters as stated in the summary. Polyesters are not recited in the independent claims. Further, independent claim 21 also encompasses polypropylene as a polymer to which the antioxidant may be added. Finally, the claims do not recite "non-phenolic" antioxidants.

**(6) Issues**

The appellant's statement of the issues in the brief (filed 6/18/04) is correct.

**(7) Grouping of Claims**

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because claims 27 and 34-37 are not under appeal. Further, contrary to appellant statement, claims 31, 38 and 39 are not limited to poly(vinyl chloride).

The rejection of claims 21,22,26,28,29,31,33,38 and 39 stand or fall together because appellant's brief does not include a valid reason/statement in support of why this grouping of claims does not stand or fall together. See 37 CFR 1.192(c)(7).

**(8) Claims Appealed**

A substantially correct copy of appealed claims appears on page 9-16 of the Appendix to the appellant's brief. The errors are that claims 23-25,27,30,32 34-37 and 40 should not be included in the list of appealed claims since these claims are not under appeal.

**(9) Prior Art of Record**

1,941,474	JAEGER	1-1934
4,082,716	FIELDING ET AL.	4-1978

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 21, 22, 26, 28, 29, 31 and 33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in

Art Unit: 1713

such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention. There is a lack of disclosure in the specification to enable one skilled in the art to obtain or make **all** of the antioxidants being claimed. There is no underlying reference either in the specification or in the record including where **all** the compounds within the scope of appellant's claims may be obtained commercially or how the "commercially available" compounds may be prepared.

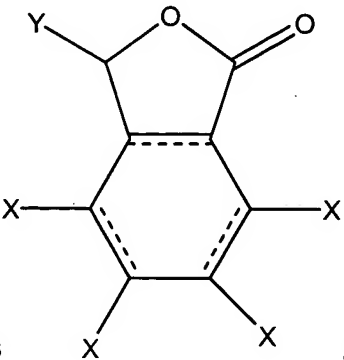
A reasonable correlation must exist between the scope of that is claimed and the scope of enablement provided by appellant's specification to the person of ordinary skill in the art. Appellant does not provide enablement for all the compounds within the scope of appellant's claims and it would require undue experimentation for a routineer to prepare at least some of the representative compounds within the scope of the claims.

Claims 21, 22, 26, 28, 29, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Fielding et al. (USPN 4,082,716)

In col. 1, lines 50-52 and col. 2, lines 1-3, Fielding et al. teach a process of combining polymers with 0.5 to 15% of phthalide, in order to produce improved polymer compositions.

Claims 21, 22, 26, 28, 29 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaeger (USPN 1,941,474).

In page 1, lines 80-106, page 3, lines 3-9, and Examples 2, 5, and 6, Jaeger teaches a process of combining polymers with about 3 to 10% of a variety of

  
phthalids , wherein X may be one or two hydrogens (alicyclic or aryl phthalids) and Y may represents hydrogens, alkyl groups or a mixture of both, in order to produce improved polymer compositions.

Claims 31, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger.

While Jaeger, above, does not explicitly teach the compounds to be useful with the specific polymers recited in the claims, it still would have been obvious to one having ordinary skill in the art at the time the invention was made to use the compounds with such polymers because, in page 3, lines 3-91, Jaeger teach that these compounds are useful with other species of resins outside of those specifically recited in the reference, which would include the polymers recited in claim 38. The species of a genus is prima facie obvious. It is appellant's burden to establish that the resinous species recited in these claims provide some unexpected results over the applied reference(s). See *In re Woodroff*, 16 USPQ2d 1934(Fed. Cir. 1990); *In re Susi* 169 USPQ 423 (CCPA 1971).

**(11) Response to Argument**

Firstly, the examiner would like to bring the affirmation of the rejections in the parent case 09/2237,10 (Appeal No. 2001-0852 rendered Sep. 2002) to the attention of the board.

Regarding the arguments against the 112, first paragraph rejections, the description in paragraphs (0008), (0010), and (0011) of the specification do not teach the preparation of **each** compound within the scope of the claims nor does it give citations for obtaining **each** compound. These paragraphs contain statements such as the “approaches [for preparing the antioxidants] are well known to those skilled in polymer chemistry” and see “general references” for chemical reactions. While the referenced sections of the specification, with regard to **some** of the claimed compounds, state that “many” derivatives of 2(5H)-furanones, thiophenones, benzo[c]thiophen-1(3H)-one, 2-thiophthalide, 3-pyrrolin-2-one or isoindol-1-one “can be purchased from commercial sources” and “[t]he remaining compounds can be easily made by a skilled synthetic organic chemist” by making derivatives of the commercially available compounds, or “another starting material using well-known organic reactions”, even with the same four specific enabled antioxidants, the broad and generic descriptions do not significantly differ from the description in the parent case, in which the 112 1<sup>st</sup> ¶ rejections were affirmed by the board for lack of enablement. Appellant does not provide sufficient enablement for preparing **all the compounds within the scope of appellant’s claims** and one of ordinary skill in the art would still require **undue experimentation** to prepare at least some of the antioxidants within the scope

Art Unit: 1713

of the claims. Clearly, undue experimentation would be required in the “approaches ... well known to those skilled in polymer chemistry” and in “general references” for chemical reactions” for preparing some of these compounds from other “starting material using well-known organic reactions”. In other words, **appellant’s antioxidant could be almost anything made from almost anything.**

Regarding the arguments against the 35 U.S.C. 102(b) as anticipated by Fielding, at least one of the antioxidants of Fielding still read on at least one of applicant’s claimed antioxidants and Fielding’s polymer still reads on at least one of applicant’s polymers. Appellant argues that “Fielding uses phthalides to improve the impact and flow properties (column 1, lines 52 to 55), while appellant’s use their antioxidants to reduce yellowing due to oxidation”. However, any advantage obtained from the composition would be inherent, regardless of whether or not the prior art intends to use it for the same purpose as appellants. An otherwise old composition is not patentable regardless of any new or unexpected properties. In re Fitzgerald et al , 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112 - § 2112.02.

Regarding the arguments against the 35 U.S.C. 102(b) as anticipated by Jaeger, appellant argues that “[n]one of [the] five polymers is mentioned by Jaeger.” However, while applicant names several polymers in appellant’s claims, there is no chemical or structural connection between the different resins. As the chemistry/structure of the polymers recited in applicant’s claims are so broad and diverse (from halogenated polymers to condensation polymers to polyethers to polyolefins, etc.), appellant’s grouping of resinous polymers is considered to be equally as generic as the generic



Art Unit: 1713

teaching in Jaeger (page 1, lines 5-8) that the compounds are useful in “various plastic composition and coating compositions, notably those containing artificial resins (synthetic polymers) **of the thermoplastic type** (emphasis added).” As such, the generic teaching in Jaeger for the polymer resin is sufficient to anticipate the generic teaching in appellant’s claims.

In response to the arguments against the rejections under 35 U.S.C. 103(a) of claims 31, 38, and 39, Appellant’s statements regarding polymers in which the phthalid compounds would be applicable are based on appellant own assumption and are not shared or suggested in Jaeger. Evidence for the fact that the polymers named in Appellants claims are combined with plasticizer compounds such as described in Jaeger can be found in US 3,654,187 (col. 2, lines 2-12 and 57-60), US 3,579,363 (col. 2, lines 10-11), US 4,136,087 (col. 3, lines 30-33) or US 4,774,277 (col. 2, lines 62-65).

Regarding the teaching of the compounds as plasticizers in the polymers, as stated by the Board in affirmation of the rejections in the parent case,

“All that is required for finding adequate motivation under the statute is to find motivation for adding compounds within the appealed claim to the substrates to which appellants add the claimed compounds for any reason, no necessarily the same reason appellants have for adding their additives.”

The fact that appellant has recognized another advantage (antioxidant properties) which would flow naturally from following the suggestion of the prior art

Art Unit: 1713

cannot be the basis for patentability when the differences would otherwise be obvious.

See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

KELECHI C. EGWIM PH.D.  
PRIMARY EXAMINER

  
KCE

January 26, 2005

Conferees

  
\_\_\_\_\_  
David Wu  
\_\_\_\_\_  
James Seidleck

RICHARD D. FUERLE  
1711 W. RIVER RD.  
GRAND ISLAND, NY 14072